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IS 8955 (1978): Edifenphos Emulsifiable Concentrates [FAD
1: Pesticides and Pesticides Residue Analysis]

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Satyanaaran Gangaram Pitroda

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“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”



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IS : 8955 - 1978

(Reaffirmed 2002)

Indian Standard

SPECIFICATION FOR EDIFENPHOS EMULSIFIABLE CONCENTRATES

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February 1979

Indian Standard

**SPECIFICATION FOR
EDIFENPHOS EMULSIFIABLE CONCENTRATES**

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(*Continued on page 2*)

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(Continued on page 7)

AMENDMENT NO.1 JUNE 1988
TO
**IS:8955-1978 SPECIFICATION FOR EDIFENPHOS
EMULSIFIABLE CONCENTRATES**

(*Page 4, clause 2.2.5*) - Add the following Note
at the end of the clause:

'Note - The material need not be subjected to
heat treatment if it has crossed half its shelf
life as ascertained from the date of manufacture
and date of expiry declared on the container.'

(AFCDC 6)

Reprography Unit, BIS, New Delhi, India

AMENDMENT NO. 2 MAY 1994
TO
IS 8955 : 1978 SPECIFICATION FOR EDIFENPHOS EC

(*Page 4, clause 2.2.5*) — Delete.

(*Page 6, clause 4.1*) — Substitute the following for the existing:

'When freshly manufactured material in bulk quantity is offered for inspection, representative samples of the material shall be drawn and tested as prescribed in IS 10627 : 1983 within 90 days of its manufacture. When the material is offered for inspection after 90 days of its manufacture, sampling shall be done as prescribed in IS 10627 : 1983. However, the criteria for conformity of the material when tested, shall be the limits of tolerances, as applicable over the declared nominal value and given under clause 2.3.1 of the standard.'

Indian Standard
SPECIFICATION FOR
EDIFENPHOS EMULSIFIABLE CONCENTRATES

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 30 October 1978, after the draft finalized by the Pest Control Sectional Committee had been approved by the Agricultural and Food Products Division Council and the Chemical Division Council.

0.2 Edifenphos emulsifiable concentrates are largely used as fungicide on agricultural crops.

0.3 Edifenphos emulsifiable concentrate formulation is generally manufactured to contain 50 percent (*mass/mass*) of edifenphos content.

0.4 In the preparation of this standard due consideration has been given to the provisions of the Insecticides Act, 1968 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under these, wherever applicable.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the requirements and methods of sampling and test for edifenphos emulsifiable concentrates.

2. REQUIREMENTS

2.1 Constituents — The material shall consist of edifenphos technical dissolved in suitable solvent(s), together with emulsifying agent(s), and with or without stabilizer(s).

*Rules for rounding off numerical values (*revised*).

2.1.1 Edifenphos, technical, employed in the manufacture of this material shall conform to IS : 8954-1978*.

2.2 Physical — The material shall comply with the physical requirements specified in **2.2.1** to **2.2.5**.

2.2.1 Description — The material shall consist of technical edifenphos dissolved in a suitable solvent, with an emulsifying agent or agents added, and shall be in the form of a stable liquid free from extraneous impurities.

2.2.2 Cold Test — No turbidity or separation of solid or oily matter or both shall occur when the material is subjected to the cold test at 10°C as prescribed in **13.1** of IS : 6940-1973† or any other lower temperature as agreed to between the purchaser and the vendor. Seedling crystal is not necessary.

2.2.3 Flash Point (Abel) — When determined by the method prescribed in IS : 1448 [P : 20]-1960‡, the flash point of the material shall be above 24.5°C.

2.2.4 Emulsion Stability — Any separation, including creaming at the top and sedimentation at the bottom, of 100 ml of emulsion prepared in standard hard water with 5 ml for public health use and 2 ml for agricultural use shall not exceed 2 ml when tested by one of the methods prescribed in **13.3** of IS : 6940-1973†.

2.2.5 Heat Stability — After treating in accordance with the method prescribed in **13.4** of IS : 6940-1973†, the material shall comply with the requirements of **2.2.1** to **2.2.4** and **2.3.1**.

2.3 Chemical — The material shall comply with the chemical requirements, specified in **2.3.1** and **2.3.2**.

2.3.1 Edifenphos Content — When determined by the method prescribed in Appendix A of IS : 8954-1978*, the observed edifenphos content, percent (m/m), of any of the samples shall not differ from the nominal value by more than the percent tolerance applied to the declared nominal value as given below:

<i>Nominal Value, Percent</i>	<i>Tolerance, Percent</i>
Up to 9	+ 10 - 5 }
10 and below 50	± 5 }
50 and above	+ 5 - 3 } of the nominal value

*Specification for edifenphos, technical.

†Methods of tests for pesticides and their formulations.

‡Methods of test for petroleum and its products, P : 20 Flash point by Abel apparatus.

2.3.1.1 The actual value of the edisephos content in the formulations shall be calculated to the second decimal place for rounding off to the first decimal place before applying the tolerances given in **2.3.1**.

2.3.2 Acidity or Alkalinity — When tested by the method prescribed in **11.3** of IS : 6940-1973*, the acidity (as H₂SO₄), or alkalinity (as NaOH) of the material shall be not more than 1·0 percent and 0·2 percent respectively.

3. PACKING AND MARKING

3.1 Packing — The material shall be packed in clean and dry containers made of mild steel suitably and properly lacquered from inside. Aluminium containers may also be used. The containers shall also comply with general requirements as stipulated in **2** of IS : 8190 (Part II)-1976†.

3.2 Marking — The containers shall bear legibly and indelibly the following information and any other additional information as is necessary under the Insecticides Act and Rules:

- a) Name of the material;
- b) Name of the manufacturer;
- c) Date of manufacture;
- d) Batch number;
- e) Net volume of contents;
- f) Nominal edisephos content, percent (*m/m*); and
- g) A cautionary notice worded as in the Insecticides Act and Rules.

3.2.1 The containers may also be marked with the ISI Certification Mark.

Note — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

*Methods of Test for pesticides and their formulations.

†Requirements for packing of pesticides: Part II Liquid pesticides.

4. SAMPLING

4.1 Representative samples of the material shall be drawn as prescribed in 'Indian Standard methods for sampling of pesticides and their formulations' (*under preparation*).

NOTE — Till such time the standard under preparation is published, the matter shall be as agreed to between the concerned parties.

5. TESTS

5.1 Tests shall be carried out by the appropriate methods referred to in **2.2.2** to **2.2.5**, **2.3.1** and **2.3.2**.

5.2 Quality of Reagents — Unless specified otherwise, pure chemicals and distilled water (*see IS : 1070-1977**) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

*Specification for water for general laboratory use (*second revision*).

(Continued from page 2)

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(Continued on page 8)

IS : 8955 - 1978

(Continued from page 7)

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